

Bladen County Natural Area Inventory

SOUTH RIVER AQUATIC HABITAT Significant Natural Heritage Area

Site significance: state

Length: 49 river miles (44 in Bladen County)

Size: 413 acres (201 acres in Bladen County)

Quadrangles: Ammon, Garland, Roseboro, Rowan, Tomahawk, White Lake

Ownership: State public waters

SIGNIFICANT FEATURES: South River Aquatic Habitat is a high quality aquatic system supporting two rare fish: Federal Species of Concern broadtail madtom (*Noturus* species 1) and State Special Concern Thinlip chub (*Cyprinella* species 1). Both are restricted to rivers and creeks in southeastern North Carolina and adjacent areas in South Carolina. South River has been designated as Outstanding Resource Waters by the North Carolina Division of Water Quality downstream from its confluence with Big Swamp in Cumberland and Sampson counties.

LANDSCAPE RELATIONSHIPS: This site extends from Big Swamp downstream to South River's confluence with Black River in Bladen and Sampson counties. It lies at the northwest end of the Black River Floodplain Macrosite, which extends downstream through Bladen and Sampson counties into Pender County. The aquatic habitat natural area is imbedded within South River Swamp Forest natural area from just upstream of the highway U.S. 701 bridge downstream to the confluence with Black River. The aquatic habitat itself is an important corridor linking the upper and lower portions of the South River floodplain. Upstream, it directly connects South River Swamp Forest natural area with Upper South River Floodplain natural area in Cumberland and Sampson counties. Downstream, it directly connects South River Swamp Forest with Upper Black River Bottomlands natural area in Bladen, Pender, and Sampson counties.

SITE DESCRIPTION: South River Aquatic Habitat comprises the active stream channel and coves of South River. Although aquatic habitats have yet to be described as natural communities in North Carolina, it is known that South River contains significant aquatic habitat, both for water quality and for the aquatic plants and animals it supports. The loss of aquatic communities in North Carolina rivers is often not as apparent as the loss of terrestrial communities. Generally, North Carolina's smaller rivers tend to retain more high quality habitat because they have been less affected by impoundments and heavy pollutant loads than the larger rivers. In addition to the rare animal populations, the aquatic habitat supports several species of waterfowl, water snakes, and fish.

MANAGEMENT AND PROTECTION: Protection of aquatic habitat is difficult because it is affected by activities throughout a watershed. Some sources of pollution can be reduced by careful control of sedimentation and stormwater runoff. A buffer zone of vegetated, undisturbed soil along river banks is also beneficial. South River should be regularly monitored to gauge impacts to water quality over time.